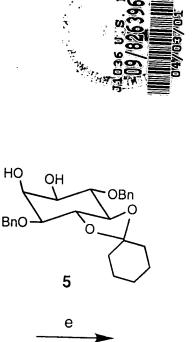
b

а

HQ



Scheme I: Synthesis of 1D-3,6-di-O-benzyl-2-deoxyfluoro-myo-inositol-4,5-bis(dibenzylphosphate) 10. Reagents and Conditions: (a) HOAc/H<sub>2</sub>O (90:10), 95 °C. (b) Cyclohexanone dimethylketal (1.2 eq.), DMSO, 40-45 °C, red. press. (c) Bu<sub>2</sub>SnO, toluene, 110 °C; DMF, 4-MBnCl, CsF, 80 °C. (d) CH<sub>2</sub>Cl<sub>2</sub>, DAST, NEt<sub>3</sub>, 35-40 °C. (e) Ethylene glycol (1.1 eq.), p-TSA, CH<sub>2</sub>Cl<sub>2</sub>, R.T. (f) (i-Pr)<sub>2</sub>NP(OBn)<sub>2</sub>, 1H-tetrazole, CH<sub>2</sub>Cl<sub>2</sub>, -40°C, m-CPBA. (g) DDQ, CH<sub>2</sub>Cl<sub>2</sub>, R.T.

Scheme II: Synthesis of 1,2-di-O-hexanoyl-sn-glycero-3-phosphoric acid (15) and 1-O-hexanoyl-2-O-(ω-Cbz-aminobutanoyl)-sn-glycero-3-phosphoric acid (18). Reagents and Conditions: (a) NaOAc buffer pH 8.5, 37 °C, PLD. (b) Ether-NaOAc buffer pH 8.5, 37 °C, PLA<sub>2</sub>. (c) ω-Cbz-aminobutanoic acid, DCC, DMAP, CHCl<sub>3</sub>, R.T.